

This report has had some rough handling!

UPPER MISSISSIPPI RIVER WILDLIFE AND FISH REFUGE

La Crosse District

La Crosse, Wis.

Highlight Statement

1 July 1975 - 31 Dec. 1975

Temperatures recorded on the La Crosse District were near normal for the period although "blue-bird" days were common during duck season. Precipitation was quite low with only 9.85 in. of moisture received compared to a normal of 14.46 inches. Most district habitat remained healthy, however, because normal river levels were maintained by the locks and dams. Marshes not directly connected to the river experienced some drying, with furbearers and other inhabitants moving out or suffering the consequences.

Waterfowl production for the district was near average, with estimated numbers as follows: mallard - 2,310; wood duck - 1,721; blue-wing teal - 300; and hooded merganser - 40. The district reached its banding quota of 200 wood ducks on August 16 by using 2-4 swim-in traps for about two weeks. Migrating waterfowl made unusually high use of the district, both in numbers and duration of use. For example, canvasback peaked at 147,000 compared to 117,750 in CY 74; widgeon at 44,750 compared to 29,100 in CY 74; and coot at 195,700 compared to 109,000 the previous year. Total use days for October and November were 6,618,000 for ducks; 5,500,000 for coots; and 125,000 for geese. Most of this use was of the 13,300 acres in the district's three closed areas.

Waterfowl hunters made an estimated 40,000 visits and took 38,600 ducks during the 50-day season. Shooting of canvasback and redheads was illegal, and district personnel made an extra enforcement effort to protect the species. More cases (35 including all LE personnel) were made than ever before. Protection was unsuccessful, however, as sampling indicated over 22% of 737 adult canvasbacks and 8% of 450 immature "cans" carried body shot. The problem centered around hunter ignorance and attitudes, and extreme vulnerability of large numbers of canvasbacks in certain areas of Pools 7 and 8.

Although canvasback protection was disappointing, research efforts by the study team (Jamestown - NPWRCC and Patuxent WRC) were quite productive. Over 1,100 canvasbacks were captured and subjected to various tests, and 500-600 of these were color marked.

Fishermen and trappers comprised the bulk of the non-hunting visits to the district, with an estimated 113,000 and 4,640 visits, respectively.

*a typical problem anywhere we are trying to protect these species and still have hunters for other ducks. Too many cannot distinguish them from other species
JRT*

The muskrat harvest was estimated at 32,000, or about 50% of the take in each of the two previous years.

District habitat improvement occurred in three areas including the fencing of a grazing trespass affecting approximately 200 acres of bottomland forest, removal of 3 derelict boat docks and a boathouse, and closing of 2 unauthorized roads on Goose Island. District personnel continued to participate in GREAT activities, particularly those involving Pools 7 & 8.

An important function of district personnel is to inform the public about the refuge. Our efforts included conducting two refuge tours for school groups, hosting three public programs, attendance at 12 meetings, and 3 newspaper articles in the La Crosse Tribune.

In addition to our permanent staff (2), work-study student Tina Honeyager and 5 C.E.T.A. employees (high school students) bolstered our ranks. Tina conducted most hunter car counts and bag checks, public use surveys, and trapping permit administration. The 4 C.E.T.A. boys assisted in many summer projects (litter patrol, fencing, etc.) and a C.E.T.A. girl performed various secretarial duties throughout the report period.

One "sour note" of the period was a break-in at the district service facility in which 200 confiscated fur traps were stolen. Fortunately many other items such as outboard motors were overlooked.

In retrospect the report period revealed no great departures from normal. The district appears to be holding its own in the face of increasing demands for recreation and other human use of refuge habitat.

UPPER MISSISSIPPI RIVER WILDLIFE AND FISH REFUGE
La Crosse District
La Crosse, Wisconsin

ANNUAL NARRATIVE REPORT
Calendar Year 1976

NATIONAL WILDLIFE REFUGE SYSTEM
Fish and Wildlife Service
U.S. DEPARTMENT OF THE INTERIOR

#2 →



← #1

I VOTE FOR #3

yep!



← #3

PERSONNEL

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Review and Approvals

Kenneth O. Butts 1/24/77
Submitted by Date

Area Office Date

La Crosse District, Upper Miss. Refuge

Regional Office Date

Complex Office

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I. GENERAL

A. Introduction

The La Crosse District of the "Upper Mississippi Refuge" is comprised of generally bottomland habitat lying primarily between the railroad tracks along 35 miles of the Mississippi River bordering the southeast corner of Minnesota and the middle western edge of Wisconsin. The district's 42,000 acres is a mixture of bottomland timber (maple-ash-elm) areas dissected by numerous sloughs and ponds; river marshes (Sagittaria, Scirpus, etc.), and open water including numerous beds of submergents (Vallisneria, Potamogeton, etc.), and bordered by 400-650 ft. wooded bluffs. The district is bounded on the north by Lock and Dam #6, and on the south by L & D #8. La Crosse, Wisconsin, with its 50,000+ people, is located in the upper portion of Pool 8 or in about the center of the district, and much of the district is "ringed" by residential development. The La Crosse district receives the heaviest public use of any of the UMR areas.

B. Climatic and Habitat Conditions

Weather and habitat conditions for 1976 can best be summarized with one word -- "dry." Total precipitation was 17.5 inches, compared to a normal of 29.1 inches. Even more drastic, however, is the fact that only 2.1 inches fell from August 1 through December 31. Total snowfall was 24 inches, or about 20 inches below normal. Temperatures were generally above normal until mid-October, when the trend drastically reversed. The year's low temperature of -22°F on 1/17 contrasted with readings above 90°F (97°F on 7/10) recorded in every month beginning in June through October. October has the dubious distinction of two temperature records: 92°F on 10/1 and 17°F on 10/17. Temperatures the last three months of 1976 were 7-10° below normal.

Early mild temperatures caused an unusually early spring thaw. Areas with current opened by mid-March, and even backwater habitat was free of ice by April 1. Fall freeze-up was also earlier than normal, with extensive backwater marshes being frozen the second week of November and practically all water including the main river frozen by December 1.

Habitat conditions were definitely affected by the drouth, although effects were somewhat minimized by the Corps' holding up pool levels in the Mississippi River and its contiguous wetlands. The annual spring flood was early and relatively mild, with flood stage (7' above normal pool) being reached on 4/6 and the river returning to normal levels by mid-May. The flood and early rains thus maintained good district habitat conditions until late summer - early fall dry weather began taking its toll on wetland

habitat not directly connected to the river. By late September many furbearers and other wetland inhabitants were displaced or destroyed by the habitat degradation. On the positive side, excellent growths of wildlife foods such as smartweed were common in many areas, and shorebirds as well as numerous scavenger-predatory animals (raccoons, herons, etc.) were attracted to the mud flats and drying potholes. Large-scale eutrophication and the final stages of aquatic succession were very evident in many large expanses of backwaters which were open water or deep marshes less than five years ago. (Photo on next page)

C. Land Acquisition

1. Fee Title

The refuge currently has no active acquisition, primarily because the authorizing legislation in 1924 limited the government to ten dollars per acre in land purchasing. The La Crosse District does contain several in-holdings including some excellent habitat, but our best hope currently seems to be for acquisition and compatible management by state natural resource agencies.

2. Easements

Not applicable.

3. Other

Not applicable.

D. System Status

1. Objectives

Operation at the NFIO level calls for elimination of the assistant district manager and use of a temporary biological aide as well as two college work study students. Refuge objectives most adversely affected would be the public use - oriented goals of quality Interpretation/Recreation programs and experiences. With the regional focus on the waterfowl maintenance objective and more specifically canvasbacks, district personnel have concentrated on canvasback protection and have participated in drawing up tentative objectives and management plans for canvasbacks in the region.

2. Funding

Historically the budgeting, funding, etc. matters for districts of the Upper Mississippi Refuge were handled primarily by staff of the Winona office. Each district



Dried-up marsh, a common sight last summer in backwaters not directly connected with the Mississippi. Note the "high and dry" beaver feeder and lotus beds. District photo (KB).

prepared its own work plan for the first time in FY 75, and in FY 77 district work plans were officially submitted so that printouts etc. would be by district rather than by the total refuge. The La Crosse District was upgraded to a two-man station when an assistant district manager position was filled early in 1973. Since that time no major changes in funding or manpower levels have occurred or are immediately expected.

In FY 76 the station budget of \$36,000 consisted of about 85% salary, including fringe benefits. This also includes 20% of the salary for one college work study student (80% is paid by the school). Over 5% went for maintenance of comfort stations at three major public access areas on the refuge. After the expenses of operating and maintaining three motor vehicles (including one with 96,000 miles) and four outboard motor rigs (2 car-top boats, 2 flat boats) is paid, very little money is left for such things as habitat management or major I & R efforts.

II. CONSTRUCTION AND MAINTENANCE

A. Construction

Nothing to report.

B. Maintenance

Several man days by district personnel and C.E.T.A. high school employees, as well as approximately \$600 by a local contractor, were spent on rehabilitation and improvement of a boat landing near the La Crosse, Vernon County line on the west shore of Goose Island. The two launching ramps were greatly improved, parking capacity was more than doubled, and the entire area enhanced for public use.

C. Wildfire

In mid-afternoon on November 18 a passing freight train started an impressive wildfire in a dried and frozen marsh area just northwest of Lawrence Lake (Pool 8, Houston Co., Minnesota). Fueled by tall dry stands of various grasses (reed canary, Phragmites, Scirpus, etc.) and a 20 mph wind, the fire burned approximately 325 acres of predominantly marsh and open savannah. It was extinguished about 11:00 PM by over 25 volunteer firemen from three area communities. Personnel of Minnesota DNR Forestry Division supervised the operation. A drastic wind switch just as the fire reached the refuge boundary saved an adjacent farmstead from destruction or heavy damage. Habitat effects were minimal and may even prove beneficial. District personnel were most concerned about saving some record and near-record trees in the general area, but only minimal damage

area, but only minimal damage occurred in the few acres of burned forest. Costs of fighting the fire will apparently be borne by the Milwaukee Railroad.

At least five or more small grass and/or brush fires, generally one to five acres in size, occurred during the fall on islands scattered throughout the district. None apparently had any serious long-term effects on wildlife or habitat. Some, if not all, were deliberately set by hunters or juvenile fire "bugs."

III. HABITAT MANAGEMENT

A. Croplands

At the present time the La Crosse District has no active farming program. A long-awaited visit in April by a Service survey crew from the Regional office confirmed suspicions of unauthorized farming on about 1.3 acres of refuge lands near Brownsville, Minnesota. The area had already been plowed when the trespass was discovered. After posting the boundary and contacting the farmer, the habitat was left undisturbed and is apparently reverting to a weedy meadow (dense nesting cover).

B. Grasslands

Three small areas of refuge meadows in Vernon County, Wisconsin, were grazed by permittees in 1976, with a combined total of 158 animal unit months (AUMS) during the period 1 May through 31 October. A fourth permittee who ordinarily grazes an area south of La Crescent, Minnesota, did not utilize the refuge this year because of personal health reasons. These grazed areas are generally low-lying meadows adjacent to grazing land owned by the respective permittees, and most have been grazed for many years. Discontinuation of the permits would require fencing the refuge boundary, and most such fences would be severely damaged or destroyed by spring floods in many years.

Overall effects of grazing in most of the permitted areas are probably beneficial to nesting waterfowl because grazing likely retards invasion by willows and other woody vegetation. This habitat manipulation is not necessarily planned to benefit wildlife, but rather has simply "happened" over a period of years because of physical (fencing-budgetary and manpower) limitations. The grazing program is being scrutinized by *Good* district personnel, and no new permit areas are planned.

Late in 1975 an area of cattle grazing trespass was discovered near Midway, Wisconsin. A local farmer had turned about 80 head of dairy cattle into a small previously unused private meadow. They soon denuded the meadow and then stripped about eight acres of refuge lands from the soil level to as high as they could

reach on the scattered trees. Affected refuge habitat included a strip of high upland grasses (moderately good duck nesting habitat) sloping down to wet meadow and then into shallow fresh marsh.



Grazing trespass area. Note contrasting tall grass on the right, which borders a privately-fenced soybean field. Assistant Manager Smith is hidden in the numbers and tall grass. District slide O-14 (KB) *1/9/76*

With the help of a YCC crew the trespass area was fenced in late July, 1976. Recovery of the habitat was subsequently retarded by severe drouth, but hopefully next year will bring healthy new growths of cover.

C. Wetlands

Unfortunately for most wildlife species, water levels in the Mississippi River navigation pools and their contiguous wetlands are controlled solely by the Corps of Engineers with limited assistance from "above." The La Crosse District thus has no active wetlands management program.

D. Forestlands

Nothing significant to report.

E. Other Habitat

In April a requested boundary survey near La Crescent, Minnesota, was completed by a Regional Office survey crew, the results of which confirmed district personnel's suspicion of refuge trespass by a local sawmill operation. Old sawdust was found to be 5-25 ft. deep on a $\frac{1}{2}$ -acre strip of refuge property lying along the western shore of La Crescent Lake (marsh). Evaluation of habitat

destroyed was difficult because of depth and age (5-10+ years) of the sawdust pile, but apparently the area was primarily upland brush. The few scattered trees are all dead, probably smothered by the deposition. Correction of the problem has been slow due to efforts to find productive use of the material and the "shoe-string" nature of the sawmill operation. Currently plans are to push the sawdust back onto the sawmill property (actually leased from railroad co.) and revegetate the area with dense nesting cover.

F. Wilderness and Special Areas

Refuge Manager Wayne Gueswell was active in reviewing areas of the Upper Mississippi Refuge for possible designation as wilderness. Two areas in the La Crosse District, the Black River bottoms (3,000 acres) and the Root River bottoms (2,000 acres), are currently under study. Both are mature bottomland forests with scattered marshes and sloughs. The study is scheduled for completion by June, 1977.

G. Easements for Waterfowl Management

Not applicable.

IV. WILDLIFE

A. Endangered and Threatened Species

The osprey is the only known threatened or endangered animal species found on the La Crosse District of the refuge. Osprey activity is limited to two or three observations in the spring and fall migration period each year. There have been no observations of nesting activity or summer use by osprey on the district. When the last osprey nested in this area is unknown, but present human disturbance levels may eliminate any future potential. There is a possibility that one or two plants listed in the June 1976 federal register may be found on the district.

The state of Wisconsin lists the double-crested cormorant, northern bald eagle and osprey as endangered species. All of these species are district migrants during the fall and spring seasons of the year. There are no records or observations of nesting activity of these species on the district. In addition to animal life, there are eight species of threatened plants that may or may not be present on the district. *finally happened! They used to come down the river in thousands! HT.*

B. Migratory Birds

1. Waterfowl

The La Crosse District encompasses thirty-five miles of river covering 42,000 acres of land and water. Weekly censusing is a

job for even a two man station. Two waterfowl closed areas are the resting place for 98% of all district waterfowl during the fall hunting season. These areas are surveyed with the use of boats and automobiles on specific routes. Birds are identified and counted by individual species with the aid of binoculars and spotting scopes. Ground counts are made once a week during migration periods and aerial counts are made bi-weekly during the fall hunting season primarily to determine canvasback populations. By using the same routes, stops and procedures in the counts fairly accurate population data is collected. A comparison between ground and aerial counts is made for general accuracy. We like to think that our population figures are in the 75-90% accuracy range.

Two factors made significant changes in the fall waterfowl migration this year. First, extreme dry weather and second, early cold temperatures.

The extreme dry conditions post-poned the northern Minnesota waterfowl season because of hazardous fire conditions. This provided a resting and feed area for large numbers of waterfowl until late October when the hunting ban was lifted. As a direct result, waterfowl by-passed the river district sanctuaries in greater numbers this year.

In a one-two punch fashion, persistent cold temperatures at the time the northern Minnesota waterfowl season opened caused a reduction in the attractiveness and availability of our habitat to birds passing through. Consequently, fall use days for at least three migrants were substantially reduced; for example:

Species	Fall Use Days 1975	Fall Use Days 1976	Reduction in use days
Canvasback	3,635,156	1,694,805	53%
Widgeon	1,445,850	826,884	42%
Coot	6,195,322	3,932,950	36%

The formation of ice on the river was three or four weeks ahead of a normal years pace. By the first week of November only major water areas, fast flowing sloughs and the main navigation channel remained ice free. The duration of waterfowl use on the district was cut short.

District Manager Butts assisted a local sportsman club in banding forty-two canada geese in March. The club formerly

propagated waterfowl on the refuge but have since established their project efforts on the Coon Creek watershed. Wood duck banding activities in August required considerable effort this year due to dry conditions and lower than normal wood duck populations. After using both swim-in traps and the cannon net, our quota of 200 birds plus twelve was met.

Canvasbacks and redheads were again protected this year during the waterfowl season. Birds of these species that were found dead or confiscated during law enforcement activities were collected and sent to Patuxent Wildlife Research Center for food analysis studies. A total of twenty-two canvasback and one red-head were shipped in February and March.

An adult whistling swan was captured on the Mississippi River ice during January after an earlier unsuccessful attempt. The bird was given nourishment and held overnight but was found dead the next morning. The swan was turned over to the Wisconsin State DNR for analysis of suspected lead poisoning.

2. Marsh and Water Birds

The district inventory plan does not call for any special method of censusing or recording marsh and waterbirds. Observation of these species are generally recorded in field notebooks while other routine surveys or work is being conducted. Using these notes at the end of each month, estimates are made as to which species were present and in what numbers. This is the best we can do under present day man power and priorities.

The one exception where good documentation occurs would be the great blue heron and great egret rookery. According to rookery survey data, heron and egret populations have stabilized the last two years. Previous to this time, herons were increasing and egrets were decreasing in numbers at the rookery site. This on-going study is looked at in more detail in the special studies section of this report.

The district was visited by three unusual species during the year including the eared grebe, Louisiana heron, and white pelican. The Louisiana heron is not on the refuge bird list of 291 species or included in the 26 species listed as rare. Two dozen pelicans arrived in August and remained until a week before waterfowl season opened. The eared grebe was sighted in the spring slough area by manager Butts during a waterfowl survey.



The first sighting of the White Pelican on the La Crosse District in recent memory. District Photo (KB)

3. Shorebirds, Gulls, Terns and Allied Species

Observation of these species are taken randomly while in the field during waterfowl surveys or other work projects. Information is compiled by the month to determine general population numbers and species present. A rare sighting was made in May of a hudsonian godwit. Uncommon sightings were made of dunlin and baird's sandpiper. General observations have not detected any significant changes in abundance of these species in recent years.

4. Raptors

Bald Eagle observation are made during the weekly waterfowl counts, the mid-winter eagle count and during other normal field work. Eagles tend to pass over the district in both spring and fall presumably because of more suitable habitat north or south of us. Peak observations vary but usually fall in 40 to 60 bird range. The fall migration was unusually late this fall and the duration of stay was short.

The casual observations of hawks passing through the district undoubtedly represents minimum figures in our reports. In 1976, no unusual trends could be determined in either species or frequency of observation. Bill Smith, a local university

student, has been doing a raptor migration study the past two years at the southern end of the district. During his studies in November which includes some banding activities, Bill captured a prairie falcon. Since this species is not found this far east and has never been recorded in Wisconsin before, it is suspected to have been a released captive.

5. Other Migratory Birds

Nothing significant to report.

C. Mammals and Non-Migratory Birds and Others

1. Game Mammals

The district conducts no bag checks or special surveys for game mammals that are hunted. Hunting results are estimated from general field observations and conversations with hunters. Even though the refuge offers limited game mammal habitat compared to its overall size, white tailed deer, rabbits, squirrels, raccoon and red fox are hunted during state seasons. Of these species, hunters were most pleased with the deer harvest. This season was the first in three years where either sex could be taken the first two days. An estimated thirty-five deer were harvested.

Two mammal populations in the furbearer category are surveyed and all furbearers taken by trapping are reported to the refuge office. Muskrat and beaver house counts are made each fall to determine population trends. Based on this information it appears muskrats recovered from a low fall population of 46,500 in 1975, to approximately 80,000 in 1976. Beaver populations have remained around 1,200 animals the past two years despite harvests of about 375 animals per year.

The red fox has never been numerous on the district and at times appears to migrate on and off the area depending on habitat conditions. Through general observation its population seemed thinner than ever this year possibly due to pressure from high fur prices.

Opossum seem to be reaching high population levels the past few years with moderate winter conditions prevailing. We might expect some reductions this winter since extreme prolonged cold weather has been experienced already.

An increase number of tracks and signs seem to indicate that otter are making more use of the refuge as well as tributary streams. The otter trapping season has been closed two years now. The refuge population is presently placed at eight "on and off" district migrants.

2. Other Mammals

Nothing significant to report

3. Resident Birds

The only significant change that has been detectable in the last year has been the absence of bob-white quail. It's difficult to put a finger on any single factor that caused the disappearance of this species. This area of the state appears to be the northern limit of the quail's range and depending on winter severity and other factors, the population fluctuates between a few quail to none at all. Quail have not been hunted for a number of years now in this part of the state.

Pheasant that are found on the refuge are located adjacent to a private game farm. The common boundary area is the only place where this game bird has been observed on the district.

4. Other Animal Life

Like most refuges, many forms and numbers of animal life exist on the district that are not surveyed or studied. It's very difficult to comment on these species other than obvious drastic changes in populations. Nothing of this magnitude was apparent during 1976.

V. INTERPRETATION AND RECREATION

A. Information and Interpretation

1. On-Refuge

The La Crosse District presently has little in the way of development to support on extensive on-refuge information and interpretation (I & I) program. A single self-guided interpretive foot trail about 0.4 mile in length, located adjacent to the public campground on Goose Island and developed in 1975, received approximately twice as much use in 1976 as in 1975, peaking at an estimated 400 visits in July. The trail has not been publicized much except through the campground registration office in an effort to encourage use primarily by family camping groups. A more promotional approach would likely result in extensive use and misuse (vandalism, motorcycles, etc.) of the trail by the thousands of casual visitors to Goose Island, many of which are just "joy riding" or engaged in pursuits far removed from wildlife (at least with its usual connotation) appreciation.

The only other significant I & I facility on the La Crosse District is an interpretive display located adjacent to a hiking path and overlooking the Mississippi River just below Lock and Dam 7. This three-panel display is on the northeastern edge of the Dresbach, Minnesota, rest area and information center for Interstate 90 travelers. In addition to the three informational panels designed to familiarize viewers with the Upper Mississippi Refuge, three new panels telling the canvasback story and their dependence on the La Crosse area were also periodically used. Approximately 130,000 visitors registered at the information center in 1976, of which an estimated 10,000 viewed the refuge display. This represents an increase of about 10% over the 1975 figures.

The only active Environmental Education cooperative program on the district is with a high school biology teacher in Lakeville, Minnesota. This instructor brought two advanced biology classes (25 students) to the district for EE exercises in 1976, including one class who camped overnight and attempted a plant survey on Rosebud Island. This is apparently the first year an organized EE effort has been tried on the district. Results were not particularly encouraging, at least partially because district personnel lacked time and know-how for proper coordination.

2. Off-Refuge

Probably the district's most significant I & I activity in this category is participation in "Wildlife Week" programs in area schools. This year district personnel gave 42 programs, mostly slide talks and occasionally movies, in 21 area schools during National Wildlife Week and the following week. Approximately 4,500 students attended the programs which averaged 45 minutes in length. Both the number of programs and student contacts were up 10% from 1975 levels. These programs presented an excellent opportunity to encourage familiarity with, and appreciation for, the refuge as well as to crusade for wetland preservation in general. Short "spot" announcements, which also mentioned the refuge along with the wildlife week theme, were aired as public service time on at least two La Crosse radio stations.

The other major I & I effort this year was refuge participation in the La Crosse Sport-O-Rama, an annual late-winter sporting good and recreational show. The refuge exhibit had two themes: telling the canvasback story with emphasis on the importance of La Crosse to the birds and to research efforts, and trying to correct the widespread local misunderstanding that the Upper Mississippi Refuge consists only of the waterfowl hunting closed areas. Besides the exhibit refuge staff also continuously alternated showing the movie "Canvasbacks"

and the Upper Mississippi Refuge slide-tape presentation, occasionally running the GEEAT (Great River Environmental Action Team) movie. Paid attendance of the event, which does not account for children under twelve, was about 7,500, or up nearly 1,000 from 1975. Effectiveness of the refuge effort was difficult to measure, but absence of live ducks for the first time in years seemed to make the exhibit more of a learning experience and less a "zoo." The movies and slide programs were unusually well attended and received.

District personnel continue to enjoy an excellent working relationship with Ken Brown, outdoor writer for the daily La Crosse Tribune. This cooperation has spawned an unusually comprehensive newspaper coverage of the district ranging from nearly full page illustrated "spreads" of district activities such as brood surveys, to short announcements of refuge-sponsored public meetings.

Just since October, 1976, the news "anchor man" for a local TV station has expressed considerable interest in refuge activities and accomplishments. This good rapport is a "first" for the district and has already resulted in two short news stories of refuge happenings. More stories are planned for early in 1977 and hopefully the working relationship can be cultivated and utilized effectively.

The long-awaited refuge Pool Maps finally arrived from the Government Printing office in 1976. These are "glorified" navigation maps which also have visitor information such as refuge regulations, policies, addresses and phone numbers, etc. Quality of the maps were disappointing, particularly the errors in defining closed area boundaries and omission of certain district lands such as the Black River bottoms. Still, the improvement over our 1920's (pre-impoundment days) land ownership maps, which previously were our only visitor handout maps, is striking and the maps have been well received. The district is trying to avoid free distribution of the maps to local residents, and instead encourage local sport shops etc. to order and distribute (sell or give to customers) the publications.

B. Recreation

1. Wildlife Oriented

Measuring the magnitude of non-consumptive, wildlife-oriented recreation presents the same problem as does measuring all types of recreation on the refuge: public access to the refuge and its perimeter is virtually unlimited and unrestricted. Public roads parallel many

miles of refuge boundary. How does one determine the number of people traveling down U.S. Hwy. 61 who stop and with (or without) binoculars observe whistling swans, canvasbacks, bald eagles, etc. in Lake Onalaska? At present much of the "guestimation" for this type of recreation is based on use figures from the Goose Island public campground. Then the unproven assumption is made that the total use of Goose Island is closely related to the campground use as well as to total district use. A formula, based on a short-term study in 1972 in which Goose Island users were interviewed to determine breakdown of their activities, is then used to obtain numerous types of public use figures for the district.

Goose Island, comprising over 700 acres of varied habitat ranging from upland oak forest to ponds and sloughs, is presently the single most important area on the district for non-consumptive wildlife-oriented recreation. Over half of the island remains in a natural state even though roughly 200 acres is developed into a public picnic and camping area (county park). The county road into Goose Island constitutes part of the boundary for a waterfowl closed area, and thus provides much opportunity for wildlife observation and photography. Canoeing and "kayaking" are also common recreational activities in the area, and are encouraged by equipment rental at the public campground. Our annual use figures for Goose Island are in the 200-250,000 range. Based on 1975 traffic counter studies, the Wisconsin Department of Highways projected the 1976 traffic rate into the island to average 425 cars per day. If the 2.96 people per car figure obtained in the 1972 study (mentioned in the preceding paragraph) is "in the ball park," our use figures are thus very conservative. With careful planning and limited development much of the present non-wildlife recreational use of Goose Island could be redirected toward wildlife and interpretive uses.

Sport fishing is by far the most prolific type of public use on the district, with 1976 fishing visits approaching 200,000. Ironically the district's most substantial public use output is also the most efficient. Practically the only effort by district personnel to maintain or increase the output is the maintenance of boat landings and comfort stations which also serve many other outputs. Unfortunately, however, a large percentage of the fishermen utilizing the district never realize they have visited a unit of the National Wildlife Refuge System. Fishing activity is varied, including tailwater fishing below the dams, main channel fishing near rock wing dams, side channel and backwater casting (bass, northern pike, panfish), and ice fishing. Total fishermen use of the district in 1976 was not materially different from the previous year, but the strikingly different weather patterns in the two years caused wide variations in

comparing monthly totals. Use figures are derived from a variety of sources including regular fishermen counts by district personnel and Corps lockmaster counts of Lock and Dam area fisherman taken three times every day.

*no confessions?
mr*



shanty town!

Ice fishing shanties on a "hot spot" south of Goose Island (Pool 8). District photo. (KB)

Waterfowl hunting is another important recreational activity on the La Crosse District, with an estimated 40,000 hunter visits in 1975. Both waterfowl hunting pressure and harvest data have, for the past three hunting seasons, been based on a cooperative survey designed and supervised by biologists of the Wisconsin Department of Natural Resources (DNR) with refuge personnel conducting most of the sampling on the Minnesota side of the river and DNR people sampling in Wisconsin. The survey is designed to yield statistically valid data for waterfowl hunting all along the Mississippi River from Pool 4 down to the Illinois, Wisconsin border. Two problems with the survey, at least from district personnel's viewpoint, is the tardiness of obtaining results and the questionable accuracy when the data is broken down on a pool or district basis. Results from the 1976 survey have not yet^{been} obtained (by January 20), and in 1975 the data was not received until late winter, thereby necessitating corrected Public Use Reports for October and November. Participation in the survey can also pose a financial and manpower burden because of the time and travel necessitated by the computerized random sampling scheme. The hiring of a college work-study student to handle the sampling minimized this burden for the La Crosse District in 1975 and 1976.

The quality of waterfowl hunting on the La Crosse District, particularly in the Wisconsin portions, has continued to decline over the past few years, even as demand apparently increases. Early season hunting closures due to drouth in inland portions of Wisconsin and much of Minnesota in 1976 contributed to even more crowded conditions with attendant "sky busting," rivalry over hunting spots, etc. Many hunters are beginning to agree with state and Service officials that some system or method of limiting or better distributing hunter pressure may soon become necessary. With the unrestricted access to the refuge and the general ignorance of hunters regarding existence of the refuge, any such project would be a real challenge.

Fur trapping on the Upper Mississippi Refuge is unique in that high fur prices (\$5 + for muskrats) have almost caused the activity to transcend true recreational status; it is more of a "business" to many trappers. The typical trapper on the La Crosse District no longer enjoys a quality recreational experience but often must contend with overcrowded conditions, trap and fur stealing, frequent "territorial" fights and cursing matches, etc. Solutions are not simple, but experience in 1976 indicate that a concerted and effective enforcement effort is a substantial aid and would be particularly helpful if combined with certain administrative restrictions.

In 1976 approximately 525 permits to trap on the refuge were issued by district personnel. This represents a 16-20% increase over last year's figures, and approaches the record year of 1974, when 550 permits were issued. Probable causes for the 1976 increase are better fur prices and a higher muskrat population. Required fur catch reports have not yet been received, but revenue from La Crosse District muskrat trapping this year will likely be \$150,000 - \$200,000 nearly all of which will go into the local economy as the refuge takes a maximum of only \$5 per trapper.

A somewhat unique type of recreation on the Upper Mississippi Refuge, and particularly in Pool 8, revolves around floating structures locally known as "boathouses." Most of the structures are under a Corps (refuge-administered) Special Use License, although the few that are connected to Service-owned shoreline are covered by a Service Special Use Permits. The district's 150 boathouses are a motley lot, ranging from small enclosures for boats to elegantly furnished floating cabins with no boat facilities other than tie-ups. The structures thus serve a wide variety of purposes including a base for hunting-fishing-trapping activity, to pleasure boating and water skiing, to non-wildlife oriented weekend "retreats" (sophisticated camping). Numerous problems with

permit administration and enforcement, and the questionable compatability of boathouses with refuge objectives and purposes, have caused district personnel to crusade for severe restrictions or eventual elimination of the structures. Meetings with the Corps of Engineers and various memoranda have aroused some bureaueratic stirrings, but nothing has yet been resolved.

2. Non-Wildlife Oriented

This category of recreation on the La Crosse District is directly tied to public use of the Mississippi River and its sandbars - pleasure boating, sandbar camping and picnicing, water skiing etc. Refuge personnel do little to encourage or discourage these activities other than providing boat access at public landings and participating in litter patrol and enforcement. This use of the district is tremendous, reaching 393,700 combined visits which represents a 21.9 increase over the 325,290 visits in 1975. Base data for these figures consist of periodic people and boat counts, people and car counts of Goose Island, and the previously-mentioned Goose Island campground use formula. Reasons for the 1976 increase are believed to be the hot and dry (little inclement week-end weather) summer, and the influx of visitors to the area due to bicentennial activities.

C. Enforcement

Enforcement duty, particularly waterfowl hunting and fur trapping regulation, is a significant component of district personnel's activities. An estimated 50 man days were spent in performing enforcement-related tasks in 1976, and this figure differs from 1975 primarily in that more trapping enforcement was substituted for canvasback protection efforts when the early freeze-up ended canvasback use of the district.

The most pressing enforcement question is how to protect the large canvasback concentrations utilizing district habitat during duck season. The number of canvasback "cases" made by district personnel in 1976 was ten, representing a 37% decrease from 1975 (16). Figures for total cases on the district-including state wardens and federal agents - are not yet compiled, but will likely show a 15-25% decrease from the 1975 figure of 35. This trend is not surprising because of the drastic reduction in canvasback use, both numbers and duration of stay. Success of protection is questionable, however, when one considers that flourescopy of 500-600 adults indicated about 30% carried body shot, and the smaller sample of immatures showed 7-8% with shot. Similar studies in 1975 revealed over 22% of the adults and 8% of the immatures were carrying lead. Frustrations (from district personnel standpoint) of the 1976 canvasback protection

effort included the scarcity of state wardens on the river due to other obligations such as inland deer poaching, and the scarcity of FWS agents after goose season opened at Horicon. These problems seem to have no solution except addition of more personnel. In spite of much publicity about protection of canvasbacks and many hunter contacts by enforcement personnel, some hunters failed to identify "cans" before shooting. As a result abandoned dead canvasbacks and crippled "cans" were not uncommon in several areas of the district. But yet The FWS "swears" that today's waterfowl hunters, because they read the ID booklet, know their ducks + that the Point System is the answer!

probably died from rusty water from all the steel shot used by hunters in area. JHL



GRZ
Says who in FWS? non
Plain stupidity!

Victim of -- anti-litter bug?, circumstances?, "shooter"?, sportsman?, ineffective or unrealistic regulations?, inadequate enforcement? District slide T-32 (MAK). *Lead poisoning! Old Age*

lack of education!
JE

Trapping enforcement problems, as indicated in an earlier section, are substantial on the La Crosse District. District personnel made 11 "prosecutable" trapping cases in 1976, a figure more than double the 1975 tally. These 11 do not include several juveniles, and numerous illegal traps or traplines confiscated without provable knowledge of the offenders' identities. As previously mentioned, this increase was a direct result of more effort made possible by the early "end" of duck season. Aside from more impressive statistics, the typical trapper response to our stepped-up efforts were quite rewarding. Our apprehension of three individuals commonly known to be brazen and chronic violators seemed to bolster trapper confidence in the refuge trapping program, and numerous field contacts with trappers increased public awareness of our presence.

What are the trapping violations?
JHL

Thorough enforcement of miscellaneous refuge regulations on the La Crosse District would probably require at least one full-time

position. These sadly neglected but common infractions include such things as littering, unpermitted firewood gathering, snowmobile and other vehicle trespass, destruction and defacing of refuge vegetation including trees, sign shooting and tampering, boathouse and dock permit violations, illegal structures (signs, dog pens, unpermitted docks, etc.) on refuge property, cultivation of marijuana on refuge lands, and a host of unpermitted activities such as use of controlled substances. The "NEMOB" (not enough money or bodies) syndrome has prevented little more than token attention to these matters. This neglect has tended to intensify some problems such as snowmobile trespass.

District personnel have become increasingly frustrated in trying to enforce the refuge regulation prohibiting hunters from camping within the public hunting areas except on sites "readily visible from the main navigation channel of the Mississippi River." The regulation apparently is meant to discourage reserving hunting spots, particularly for the early morning duck hunt; and also to generally keep hunters out of the refuge after shooting hours when temptation to poach game would be greatest. The problem revolves around the definition of "to camp" and of "refuge lands." The common practice is for hunters to bring campstoves, coolers, lawn chairs, etc. to one of the district duck hunting "hot spots" on the evening before duck season opening. This equipment is then set up and utilized on refuge land, but actual sleeping (camping?) is done in the hunter's boat which is just off shore or maybe even partially pulled up onto the marshy shoreline. Even with photos and full hunter identity etc., no one seems willing to prosecute such cases. The problem thus continued to build in 1976.



*Seems if he has
camping equip. +
sleeps overnight
it is a valid question?
I'd say so!*

*Looks like a
portable steam
bath to me!*

Duck hunter's boat "tent." Is this camping, and is it on refuge lands? District slide T-37 (PTS).

yes - no question

VI. OTHER ITEMSA. Field Investigations1. Canvasback Research

Beginning the middle of October, the canvasback research team from Jamestown, North Dakota and Patuxent, Maryland, began capturing canvasbacks on navigation pools 7 & 8. This on-going study which began in the La Crosse area in 1972, has been centered on canvasback concentration areas during migration. Birds captured this year were weighed, sexed and aged, banded, and flouroscope for lead shot studies. A total of 778 canvasbacks were processed in four weeks of work. Preliminary reports indicated that 31% of the adult canvasback were carrying shot compared to 22% last year. "mistaken" for greenhead, wood duck, etc. These results were not encouraging considering the fact that the canvasback is a protected species in all areas where the bird concentrates during migration. Comparable data taken from 959 captured scaup in the La Crosse area indicated only 8% of the adult males were carrying shot. One particular canvasback when flouroscope revealed nine shot pellets of various sizes.

see Page 17
GRZ

Concern also has been expressed as to why only half as many canvasback showed up in La Crosse and in other key river areas. Are population numbers lower than current estimates or have migrating patterns, time tables, etc. significantly changed? These and other questions hopefully will be answered by future study.

2. Rookery Study

District personnel have conducted a great blue heron and great egret productivity study each year since 1972. The rookery study involves three trips to the rookery each year to determine the number of nests present, the amount of nesting activity, and the number of young per nest. Since observations began, there has been a 25% increase in the number of nest trees and a 35% increase in the number of active nests. Great blue heron production has increased from 542 in 1972, to 1,243 in 1976. Great egret production went from 212 in 1972, to 157 in 1976. The first three years of this study showed a 48% drop in egret nesting activity and production. Reasons for this are unknown; however, the last two years have indicated a modest comeback to 74% of the previous high population level.

Dr. James Elder, a FWS environmental contaminants specialist, conducted a tissue analysis of herons from the La Crosse

rookery and three other locations on the Upper Mississippi River. Young birds taken from nests were used to determine the amount of poly-chlorinated biphenyls (PCBs) present in the ecosystem at specific locations. His findings indicated that the La Crosse area ranked second highest with levels ranging from 0.7 to 6.7 ppm and averaged 2.7 ppm. Other contaminants identified included dieldrin, DDT and its metabolites DDE and DDD. It is not known what level of PCB accumulation poses a threat to the welfare of great blue herons. Dr. Elder confirmed that environmental contamination by PCBs is largely "urban-industrial" in origin.

A more conventional threat to herons and egrets occurred in June when a summer thunder storm and high winds destroyed 12% of the rookery young. The actual count revealed 157 herons and 37 egrets on the ground for this particular storm.

B. Cooperative Programs

1. YCC Program

The La Crosse district provided work projects for the Trempealeau National Wildlife Refuge and Genoa National Fish Hatchery YCC program. The twenty-four enrollees in the non-resident camp came from the La Crosse, Trempealeau, and Genoa areas. Three vehicles were secured to transport the four work groups from meeting sites to work areas. The first year camp developed various problems in operations, three notable ones being logistics, limited project funds, and supervisory control of work group members. The La Crosse district was pleased with work completed by the YCC crews. Projects included: a quarter-mile barbed wire fence at a cattle trespass site, construction of three hundred yards of barrier fence on Goose Island, the addition of wood chips to the Goose Island nature trail, removal of litter from major river island sand bars, and the removal from the river of three derelict boat docks and two boathouses. We look forward to providing work projects for the 1977 summer YCC program.



YCC crew takes a break from derelict boathouse removal project. District Photo (PTS)



Nice

Barrier fence constructed by YCC crew on Goose Island to prevent vehicle trespass. District Photo (KB)

good another

2. C.E.T.A. Program

La Crosse County administers the Federally Funded C.E.T.A. program whereby the refuge receives the services of high

school students. This year Diane Hatch (1/1-5/21) and Charlene Stoddard (6/14-12/31) assisted office operations as secretary-typist and other functions. The summer crew consisted of an additional three workers: John Gilbert, Jay Ammerman, and Eric Newman. All these individuals contributed substantially to refuge programs.

3. Work-Study Program

The district was fortunate to acquire the services of John Hopkins as a fall semester work-study student. John, a recreation major at Wisconsin State University-La Crosse, conducted hunter bag checks, public use counts, and handled trapping permit sales for the district. This program provides the student with first-hand experience and knowledge of the day-to-day operations of an agency. At the same time, the refuge receives valuable assistance from capable man power at minimal cost (20% of wage). The work-study program is the only tool currently available at the district level to provide qualified man power for numerous necessary tasks.

4. G.R.E.A.T.

The Great River Environmental Action Team has been actively pursuing its objectives during 1976. District personnel are members of the Fish and Wildlife and Side Channel Opening work groups. Manager Butts is coordinator of the dredge spoil inspection Team for navigation pools 7 & 8. From a district stand point, progress was made in the area of spoil placement from main channel maintenance dredging. At one dredge site, spoil was transported by barge to the La Crosse Landfill to be used as fill. Another dredge site utilized on old spoil island to completely contain the new spoil. These are just examples of the type of progress being made by the GREAT team.

C. Items of Interest

The district has been embracing a habitat enhancement effort the past few years. The process began with the reclaiming of FWS lands under permit for private cabins. Other examples of this process include: the phasing out of a local sportsmen's club permit by 1980, the fencing of two major grazing trespass areas, the planned elimination of grazing units as current users cease grazing, and the re-evaluation of the existence of boathouse structures on the river. The most recent habitat improvement area involves a radio station permit site on government land. The problem here stems from the grazing and farming activities on the permit site. The permit prohibits

any use of the land except for the purpose of radio station operations. The station owner presently refuses to stop grazing and farming because this has been going on for twenty years.

This experience points to an important lesson. Years ago a seemingly unimportant task (inspection of permit sites) was placed on the job schedule as a low priority, consequently, because of lack of time (man power) the job wasn't done.

Many of today's problems can be traced back to the "low priority status"; for example, boathouse permits and the refuge's identity. There have always been priority lists and man power shortages for this magnificent river refuge. The river has been considered "ready made," everlastingly abundant, and in need of little management. This was determined at a higher level with a higher list of priorities and shortages. Unfortunately, people management has been the ultimate loser and this is now reflected in the resource.

Late in 1975, a group of property owners adjacent to Lake Onalaska formed a lake rehabilitation district. Under the new lake rehabilitation law of June 1974, property owners and local units of government can form lake districts for the purpose of receiving state funds to correct lake problems. Lake Onalaska, through the natural process of eutrophication, has been slowly changing over a period of forty years. Current property owners complain about the lake's shallowness, "weed" problems, inability to use it for swimming, and difficulty of fishing. As a result of all this activity, state approval was given in May to allow limited chemical control of vegetation near shoreline home sites. The refuge was concerned because this general area is a major canvasback resting site during the fall migration.

District personnel participated in a meeting with the FWS personnel management evaluation team (Washington Office) at Winona, Minnesota, October 14.

Manager Butts attended a Civil Service equal employment opportunity training course in St. Paul, Minneapolis during April.

District Manager Ken Butts completed sections I, II, III and IV of this narrative report. Assistant Manager Peter Smith completed sections IV and VI. C.E.T.A. secretary Charlene Stoddard typed the entire report.

D. Safety

A eletrical safety inspection of district facilities was conducted in September. Two hours of defensive driver training was received during the refuge staff meeting in January. Eight hours of Red Cross^{et} first aid training was recieved in April.

District Manager Butts was involved in a minor auto accident involving the district's 1971 Plymouth sedan delivery. Damage to the government vehicle was just under \$300. The other driver was totally at fault and her insurance payed all damages.

paid?